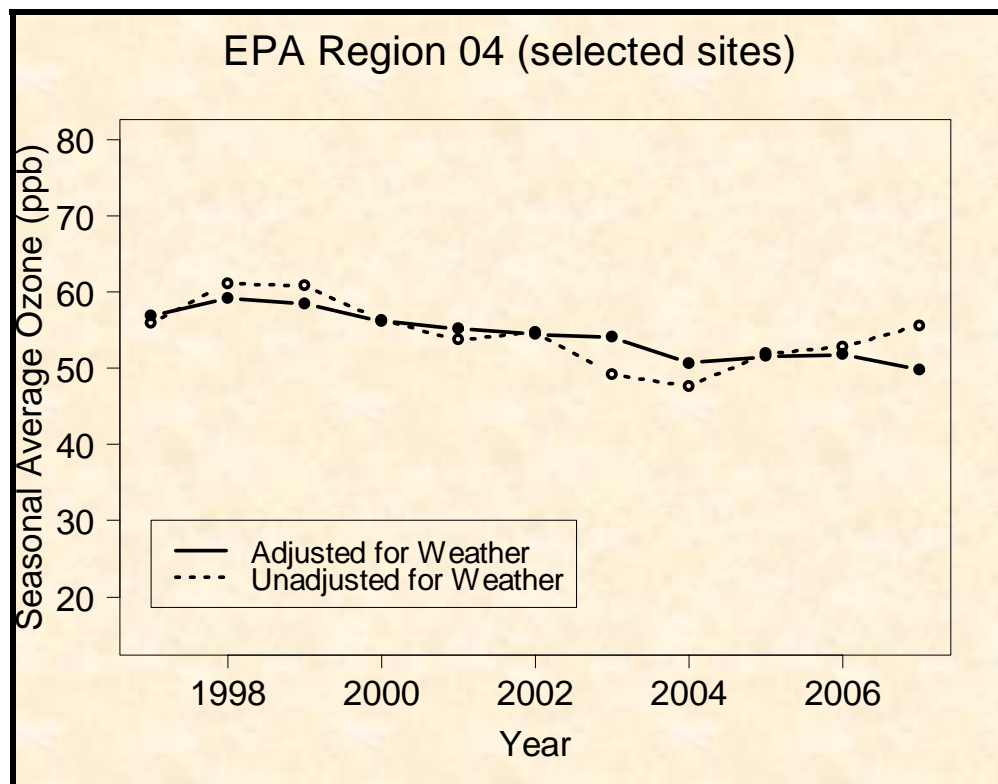


Weather Makes a Difference: 8-hour Ozone Trends for 1997-2007

State and Local Information for EPA Region 4

Alabama
Florida
Georgia
Kentucky
Mississippi
North Carolina
South Carolina
Tennessee

Composite trend for available sites in these states:



U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Air Quality Planning and Standards

April 2008

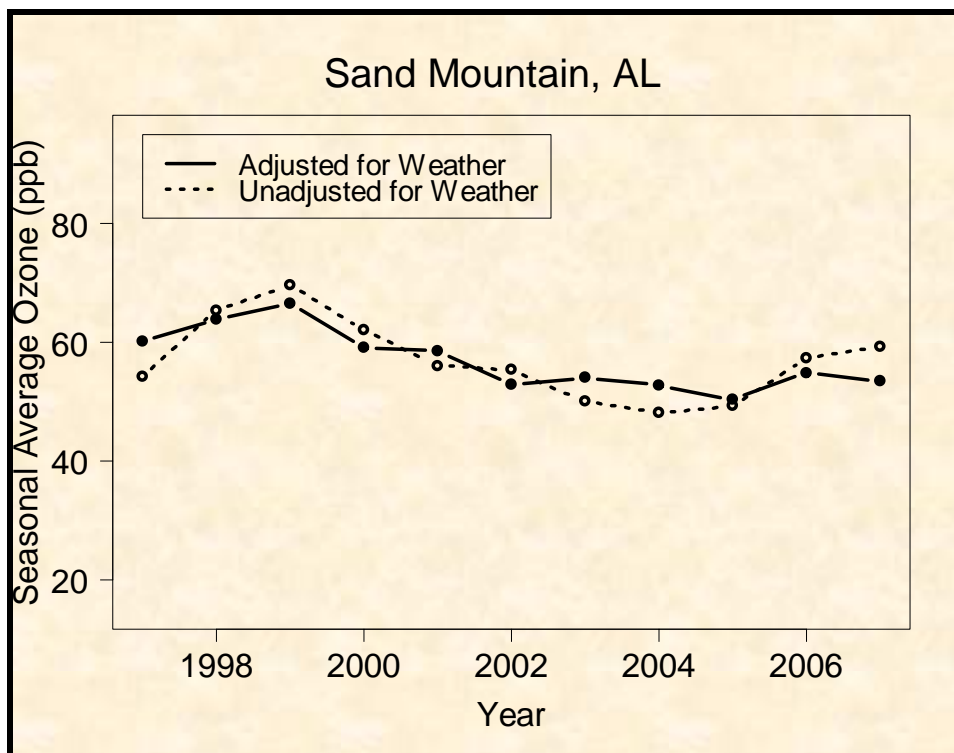
Alabama

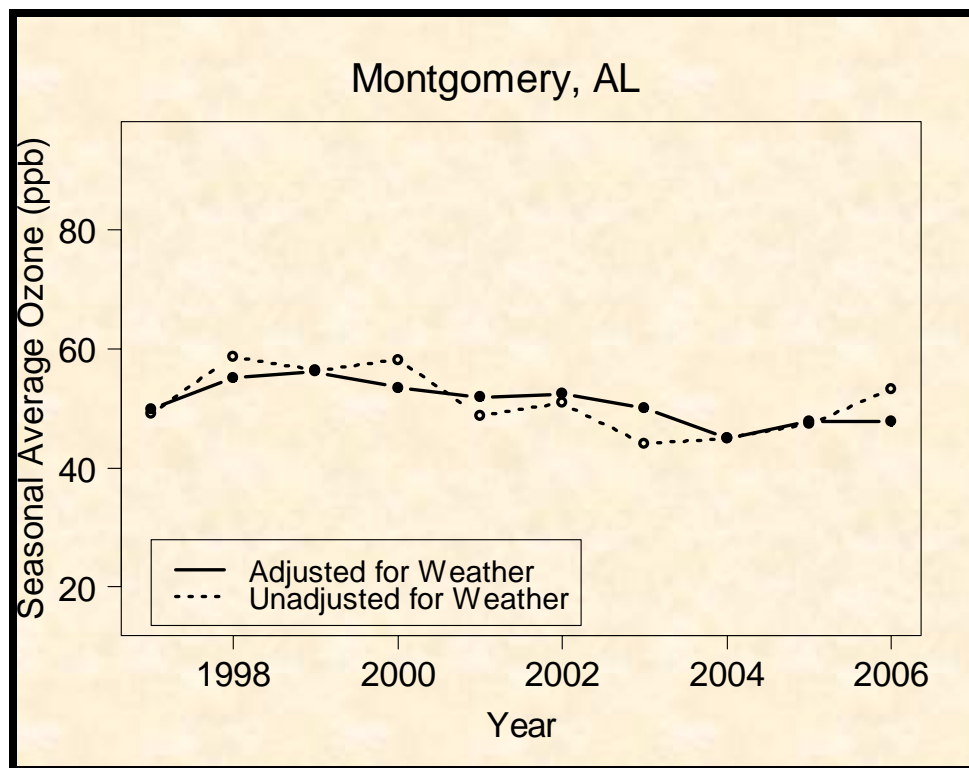
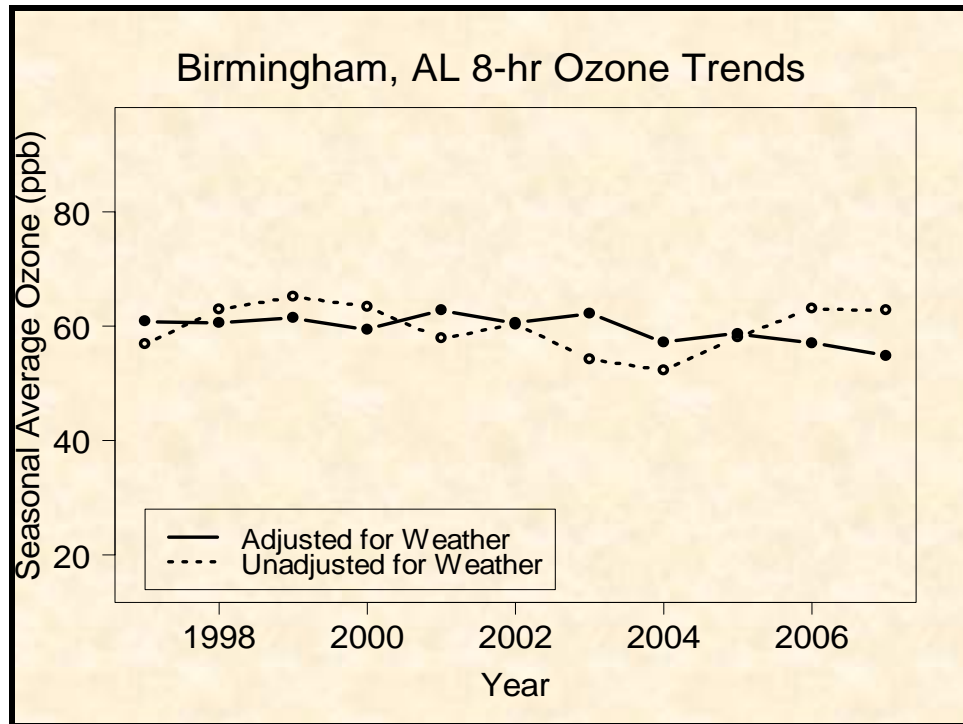
Ozone

On average, ozone adjusted for weather conditions declined 9 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO_x and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2006 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

Seasonal Average 8-hour Ozone Trends





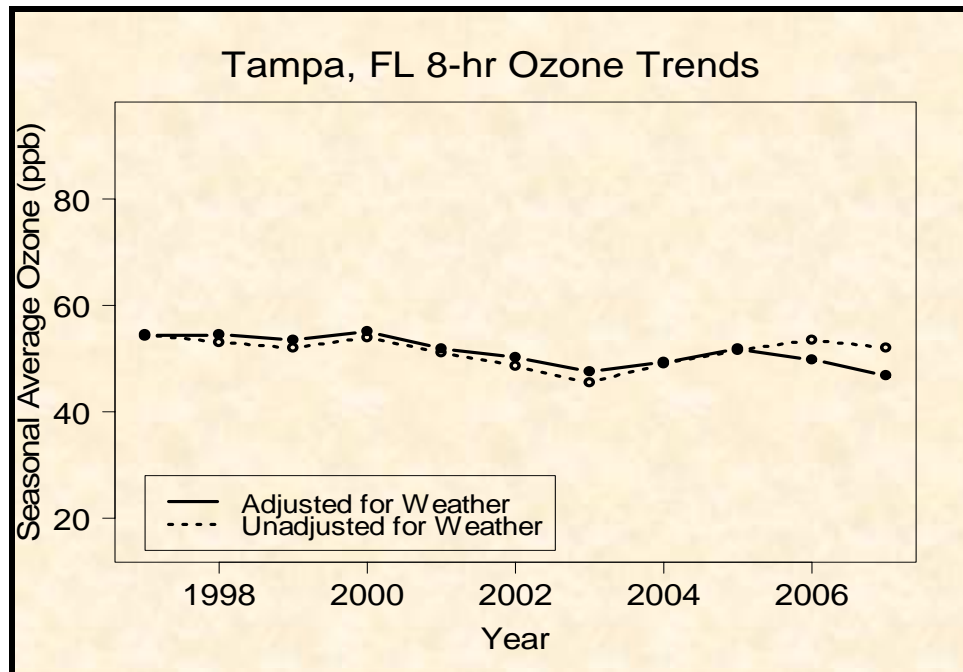
Florida

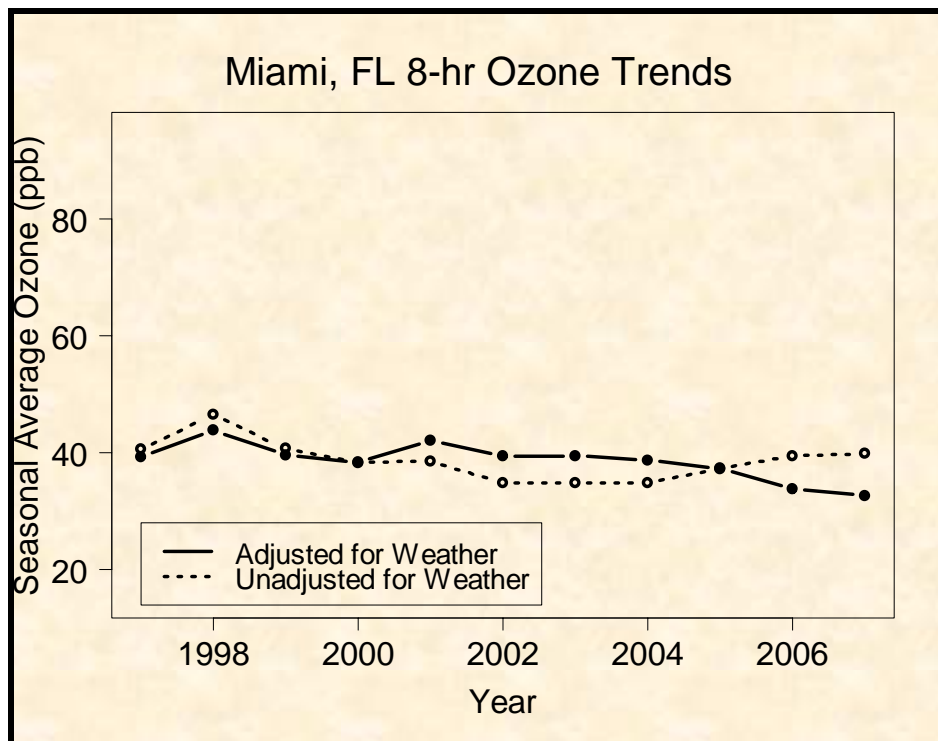
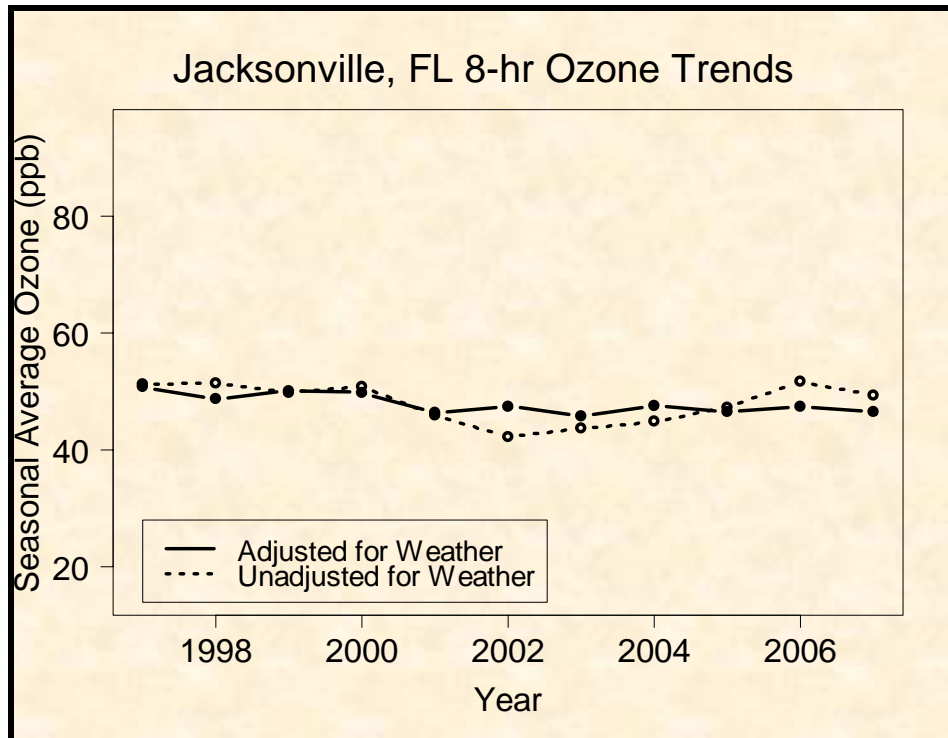
Ozone

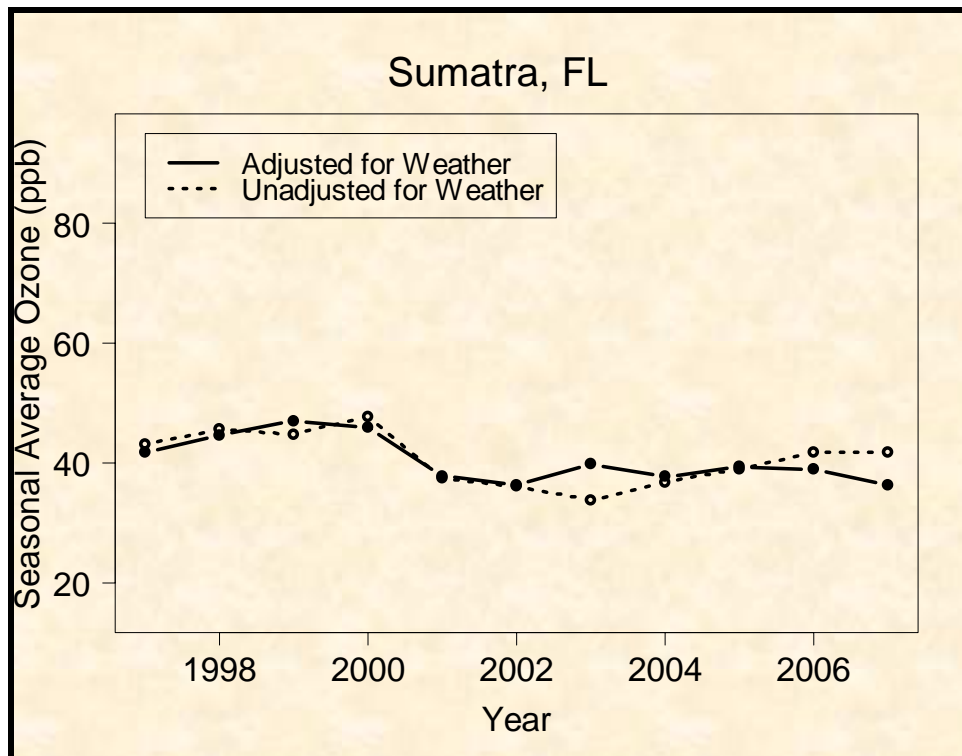
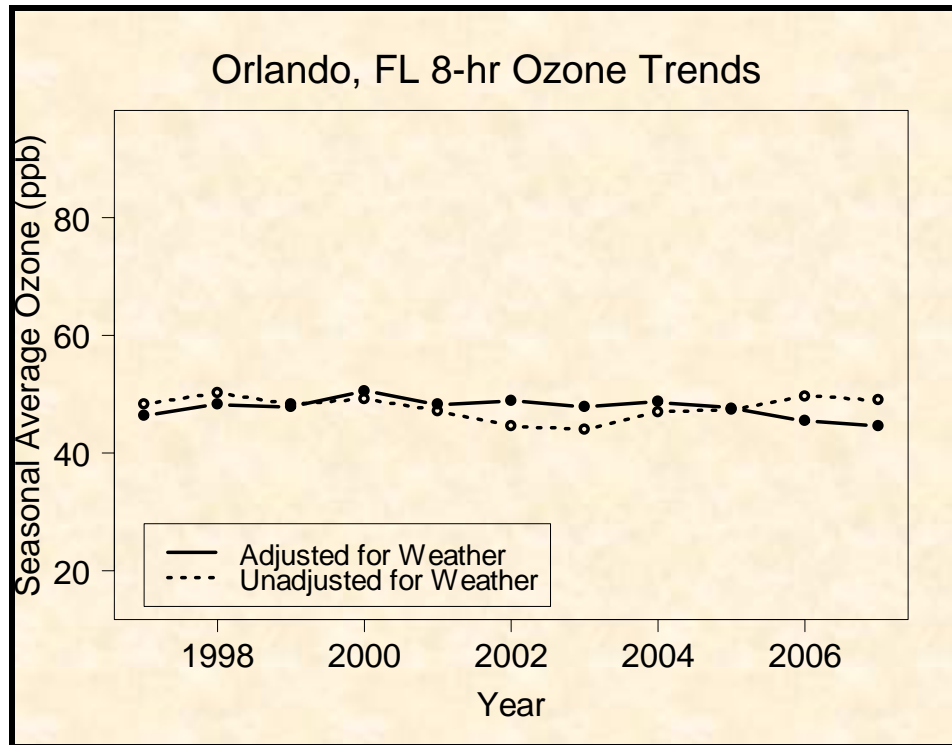
On average, ozone adjusted for weather conditions declined 11 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO_x and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

Seasonal Average 8-hour Ozone Trends







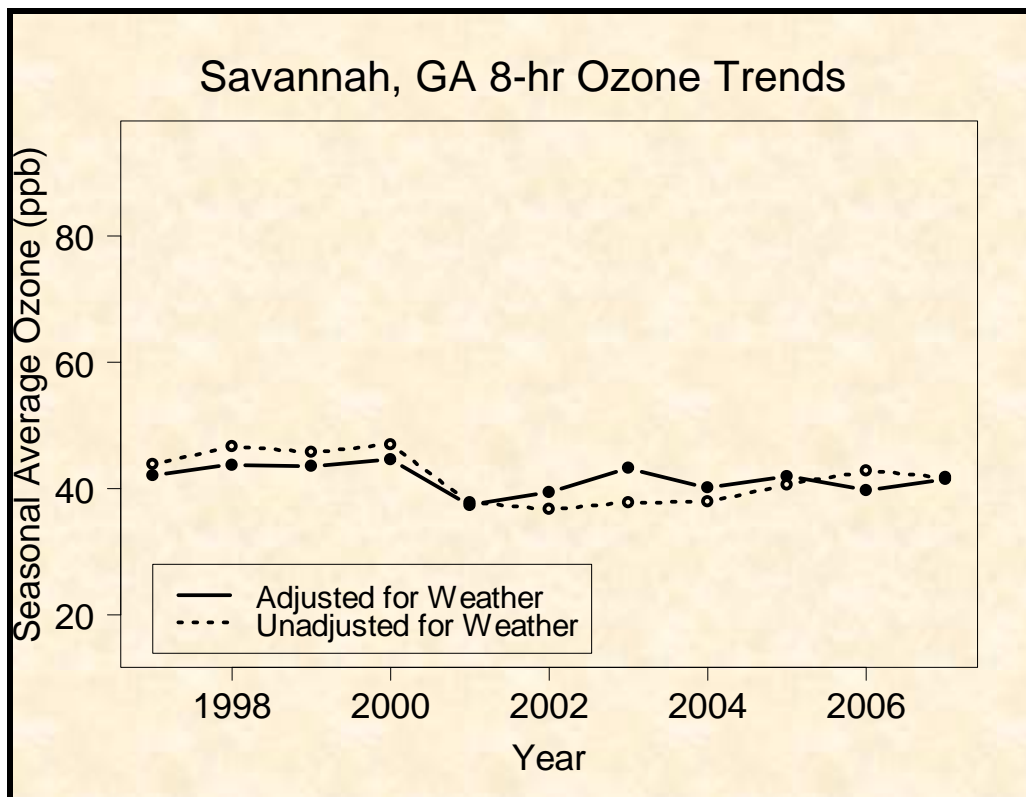
Georgia

Ozone

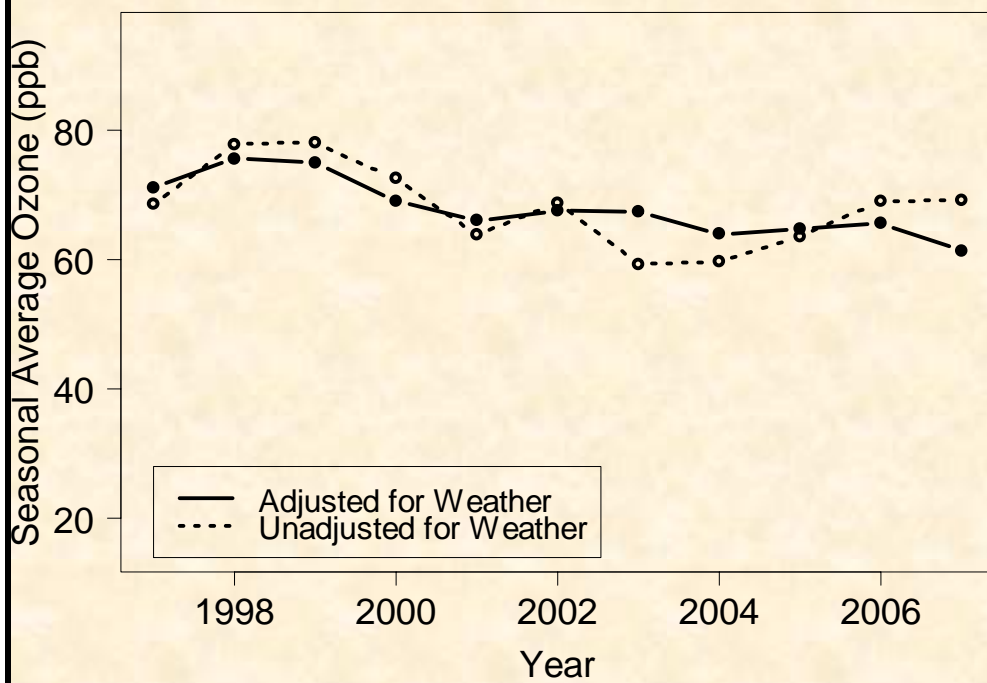
On average, ozone adjusted for weather conditions declined 9 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO_x and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2006 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

Seasonal Average 8-hour Ozone Trends



Atlanta, GA 8-hr Ozone Trends



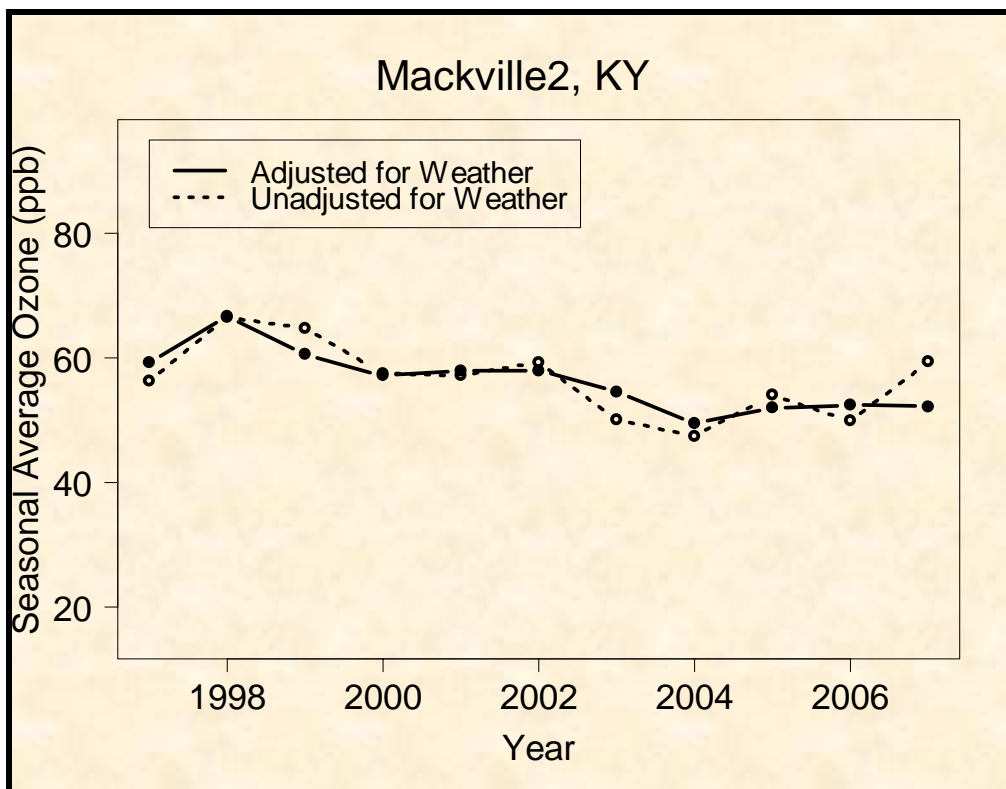
Kentucky

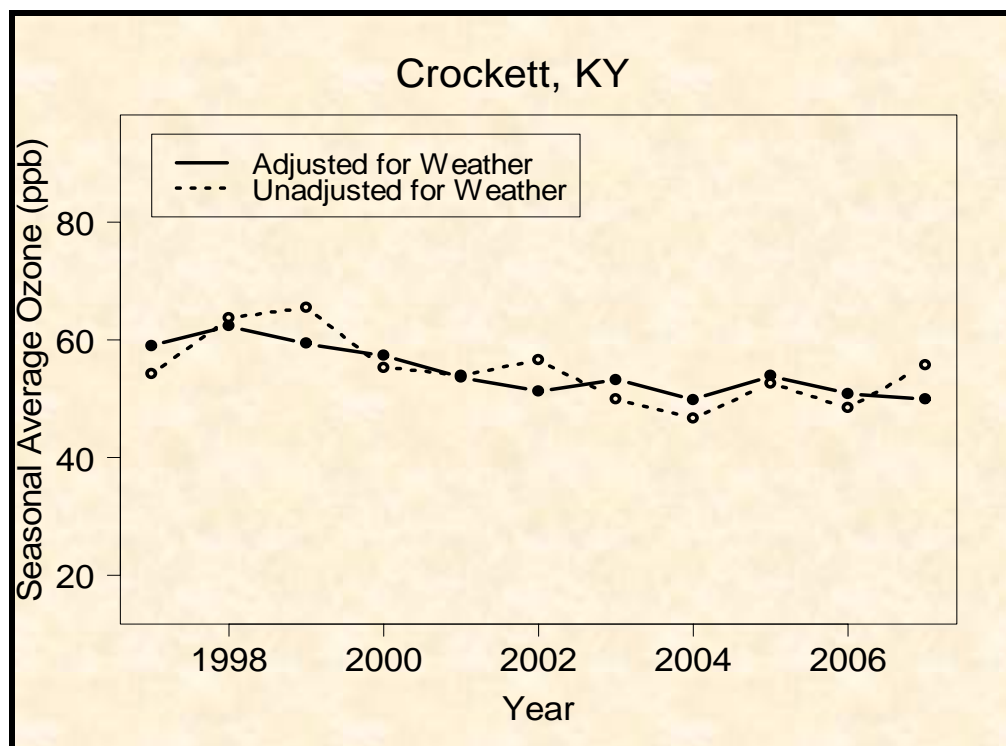
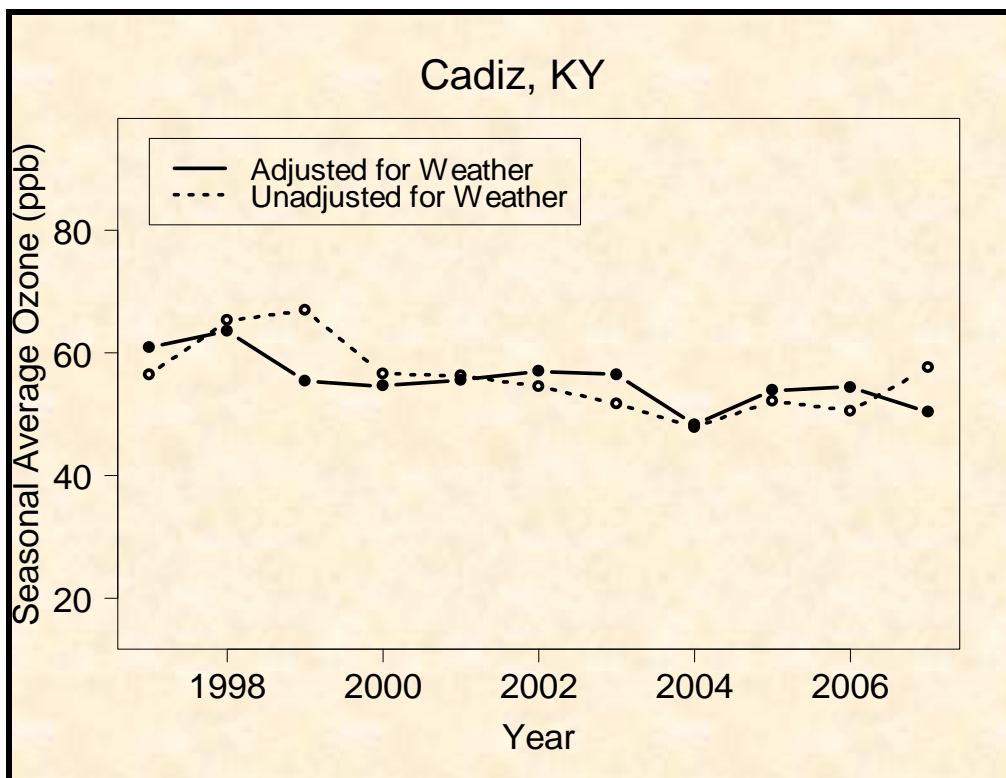
Ozone

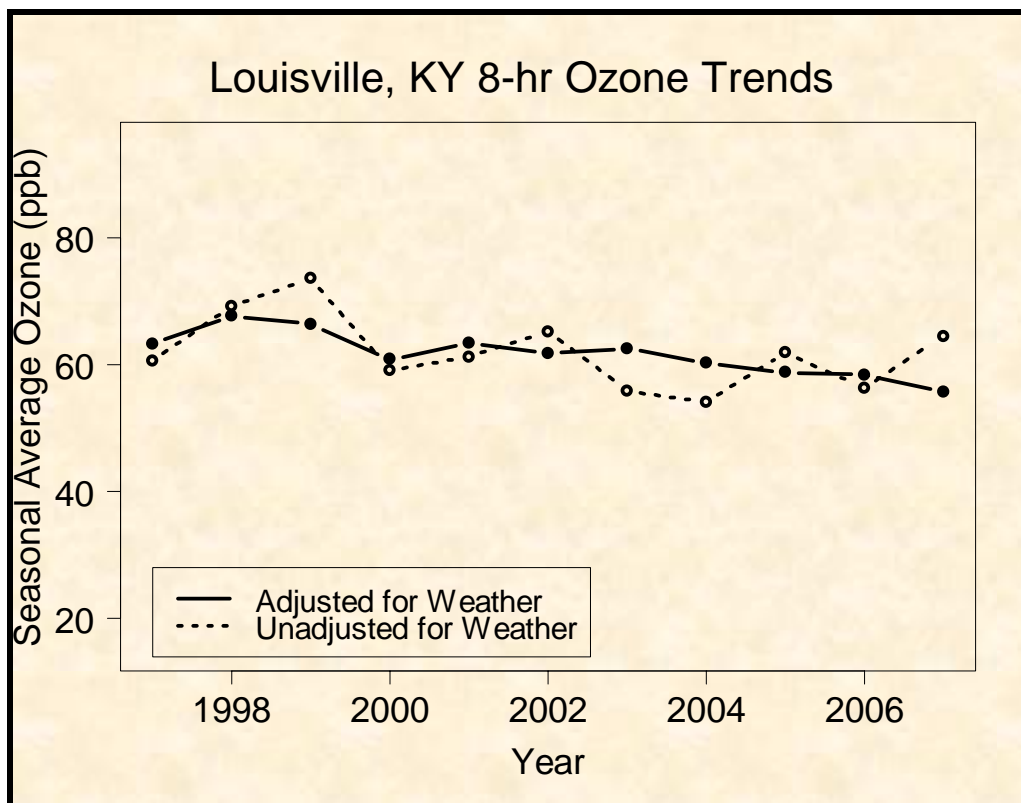
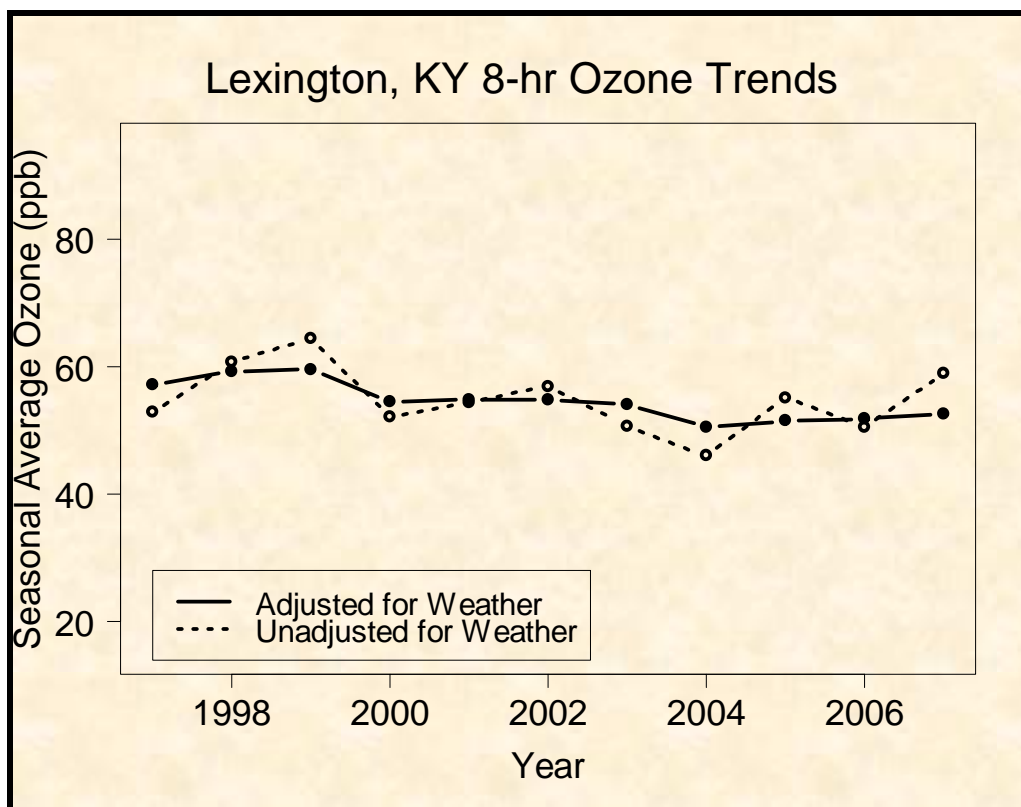
On average, ozone adjusted for weather conditions declined 12 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO_x and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

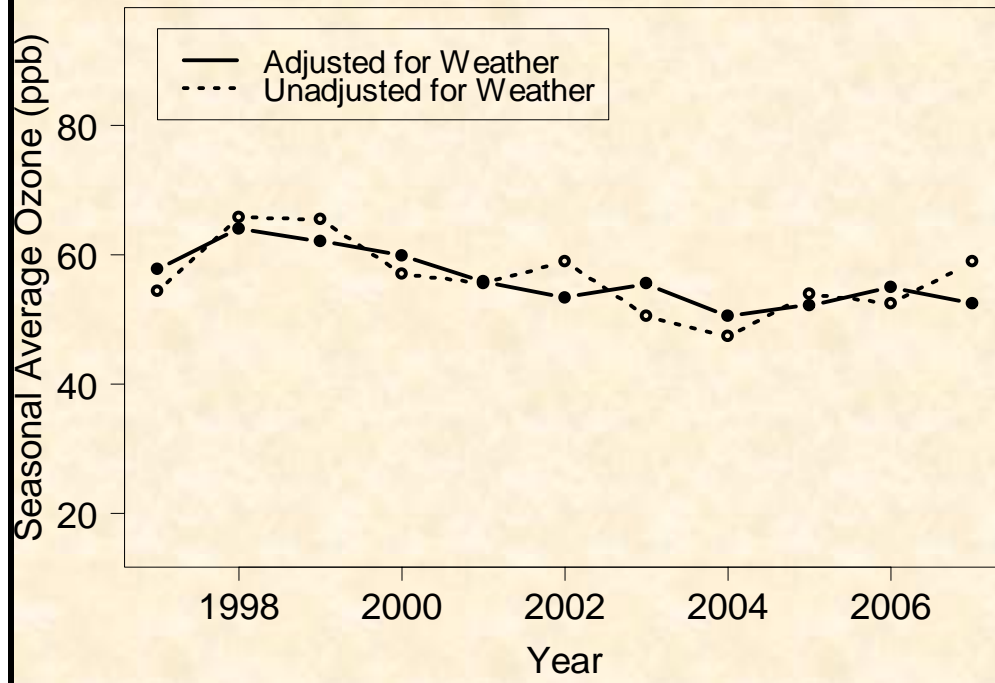
Seasonal Average 8-hour Ozone Trends







Mackville, KY



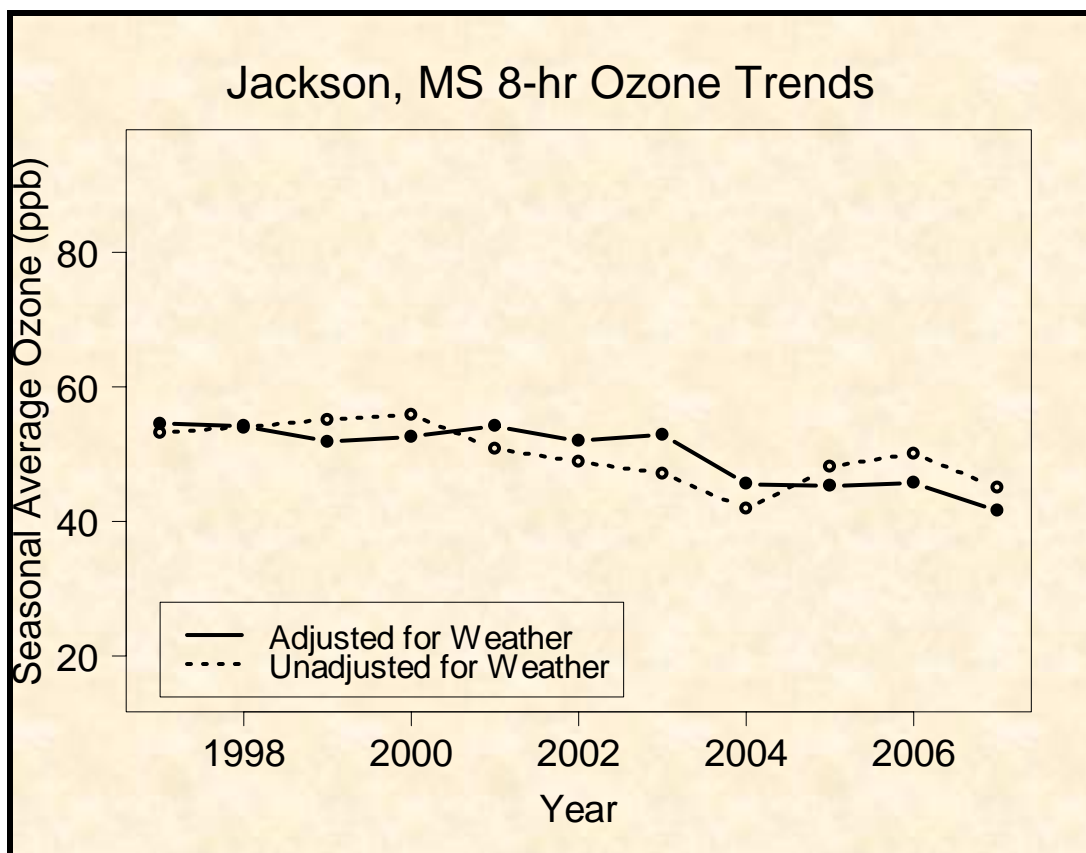
Mississippi

Ozone

In Jackson, MS, ozone adjusted for weather conditions declined 24 percent between 1997 and 2007. This improvement in ozone is in response to both state and regional reductions in NO_x and VOC emissions.

Trends for 1997-2007 for a site with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

Seasonal Average 8-hour Ozone Trends



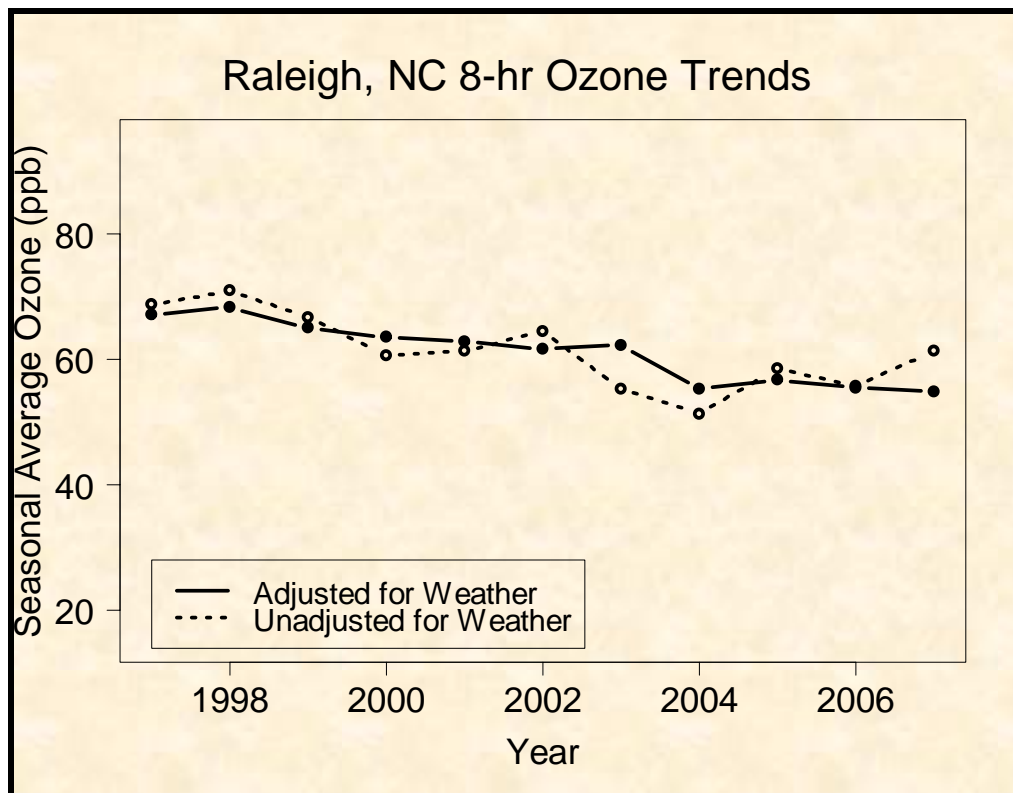
North Carolina

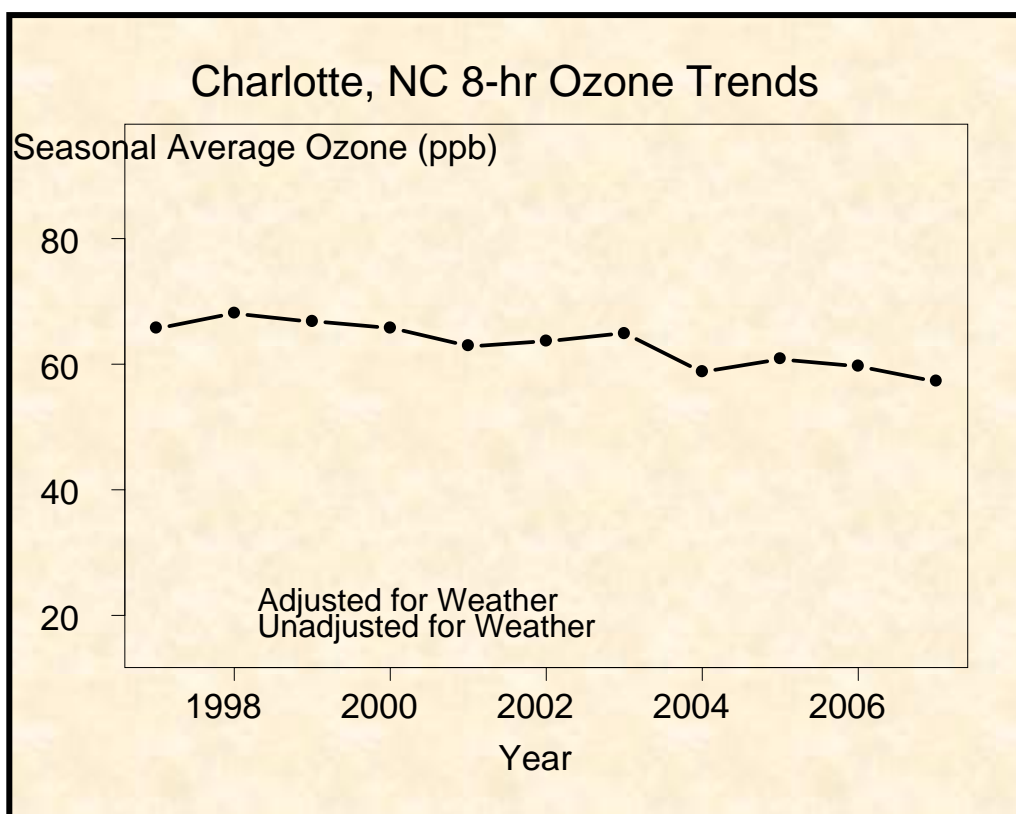
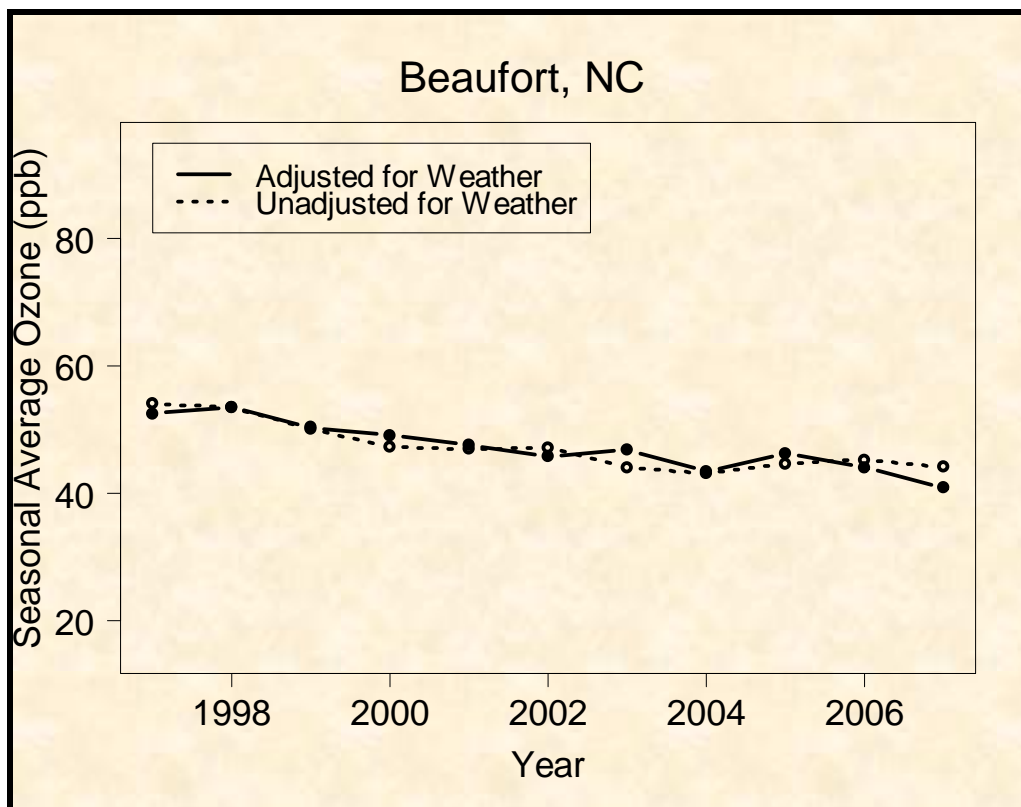
Ozone

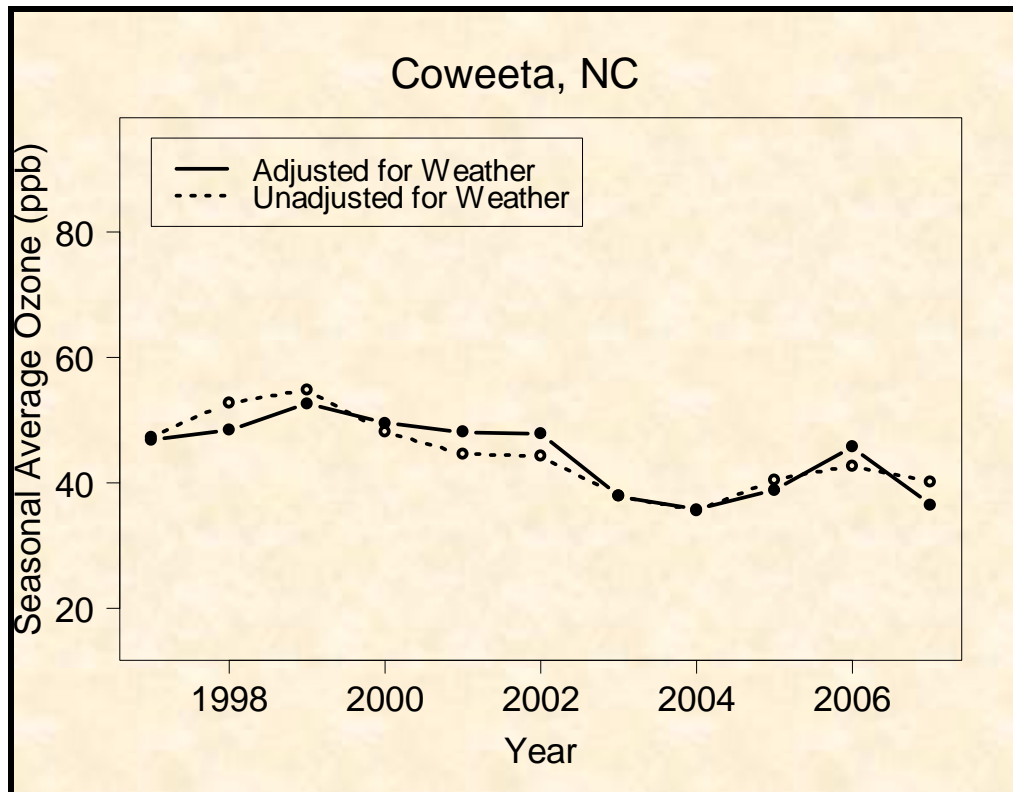
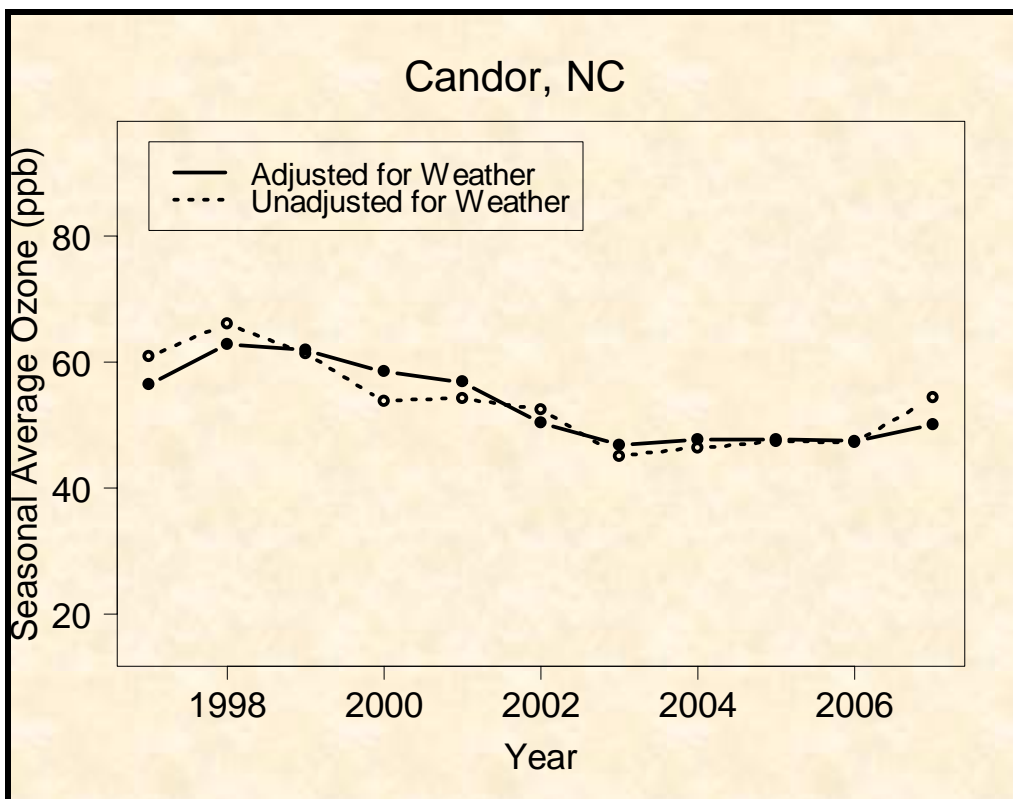
On average, ozone adjusted for weather conditions declined 16 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO_x and VOC emissions. The level of ozone improvement varies from site to site.

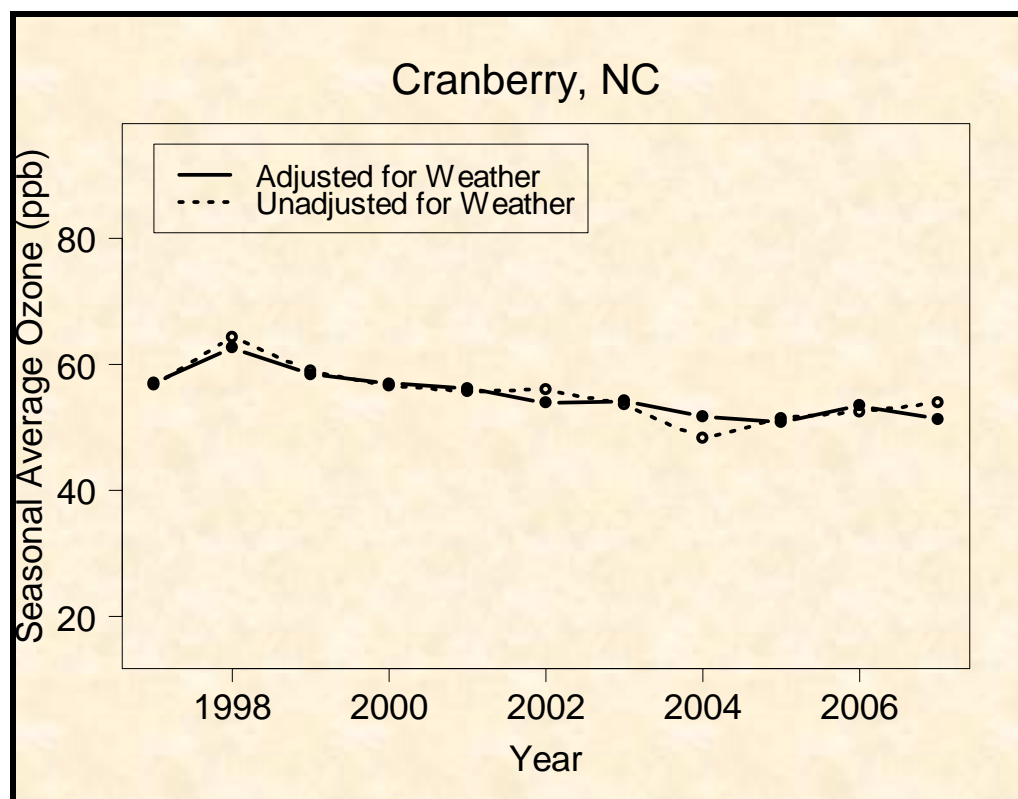
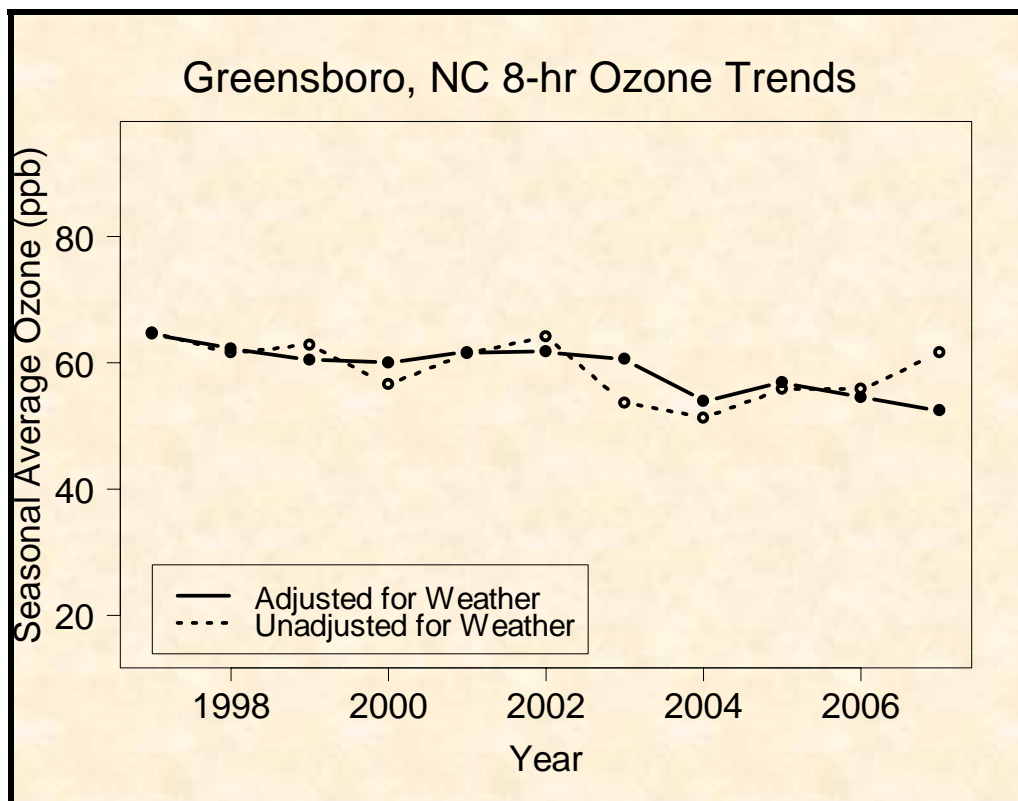
Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

Seasonal Average 8-hour Ozone Trends









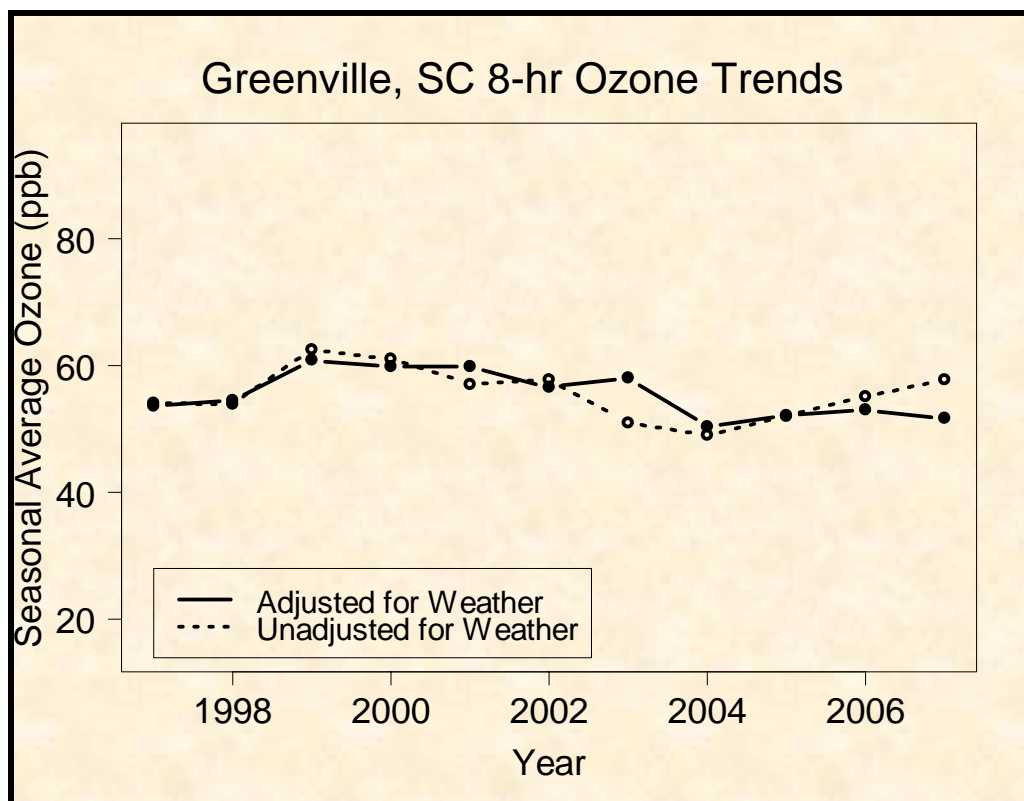
South Carolina

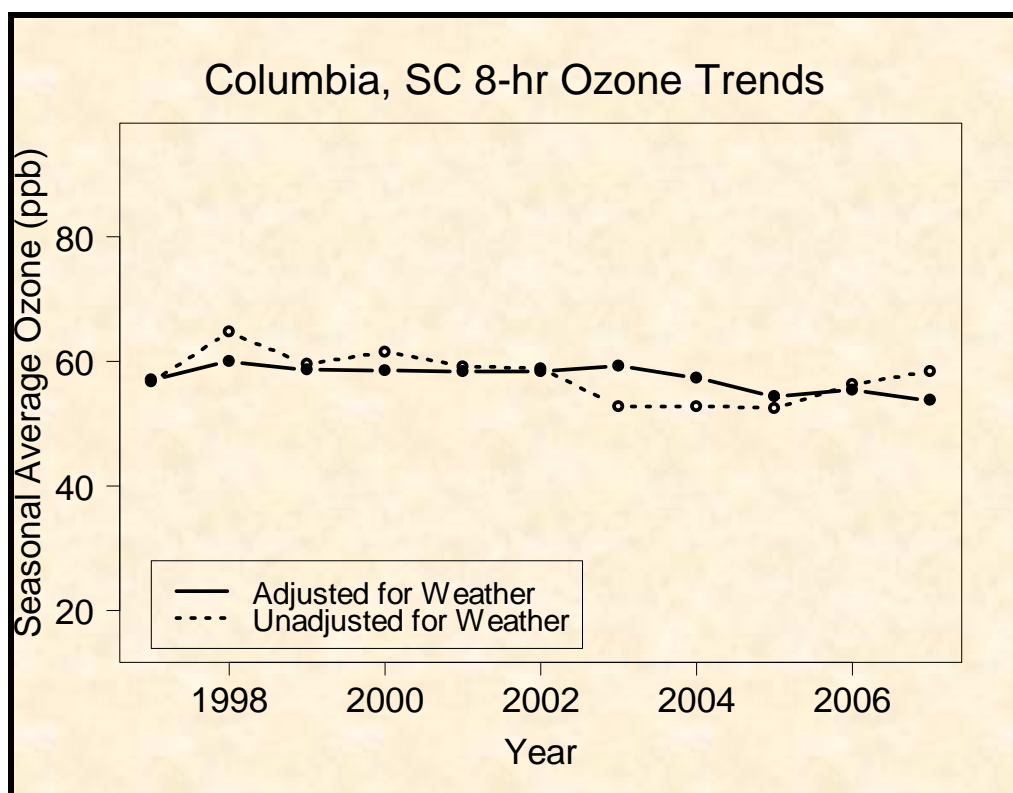
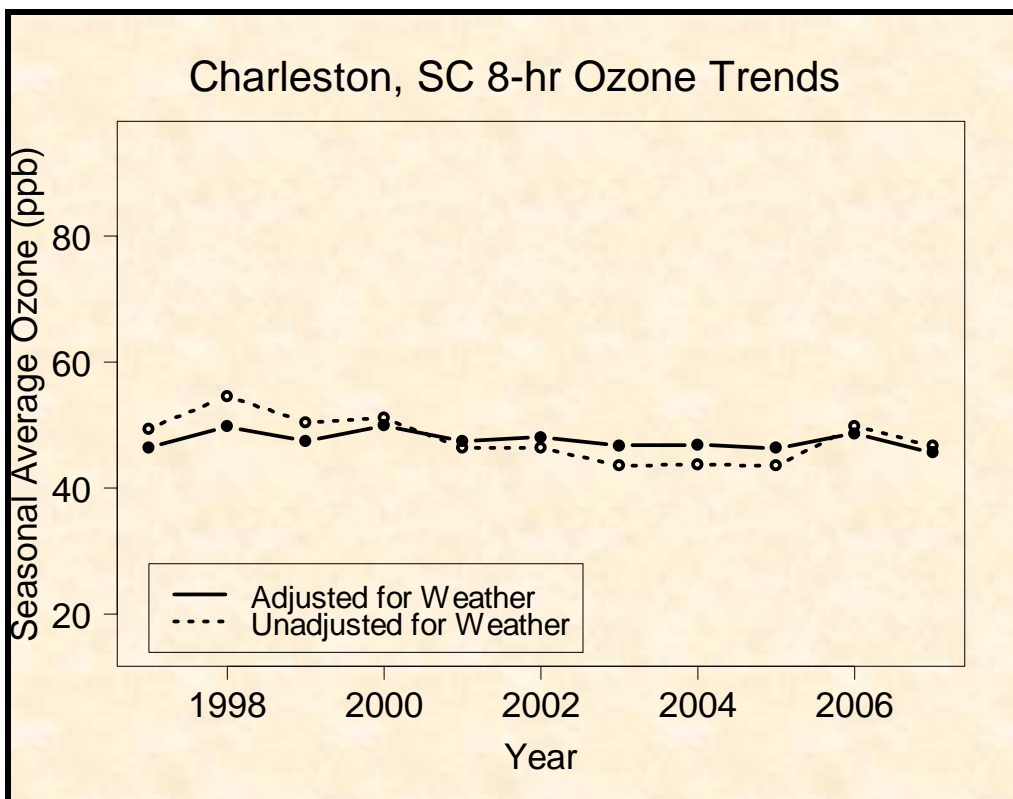
Ozone

On average, ozone adjusted for weather conditions declined 4 percent between 1997 and 2007. There have been improvements in Columbia and Greenville in recent years. These improvements in ozone are in response to both state and regional reductions in NO_x and VOC emissions. Ozone trends vary from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

Seasonal Average 8-hour Ozone Trends





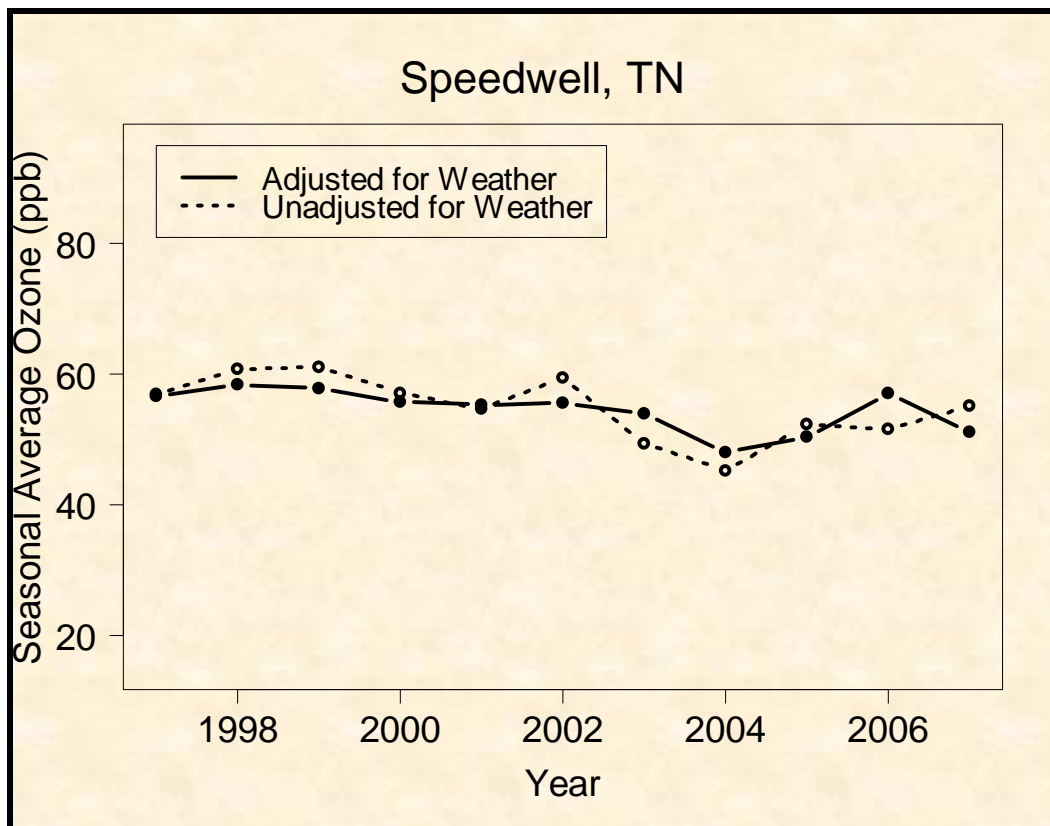
Tennessee

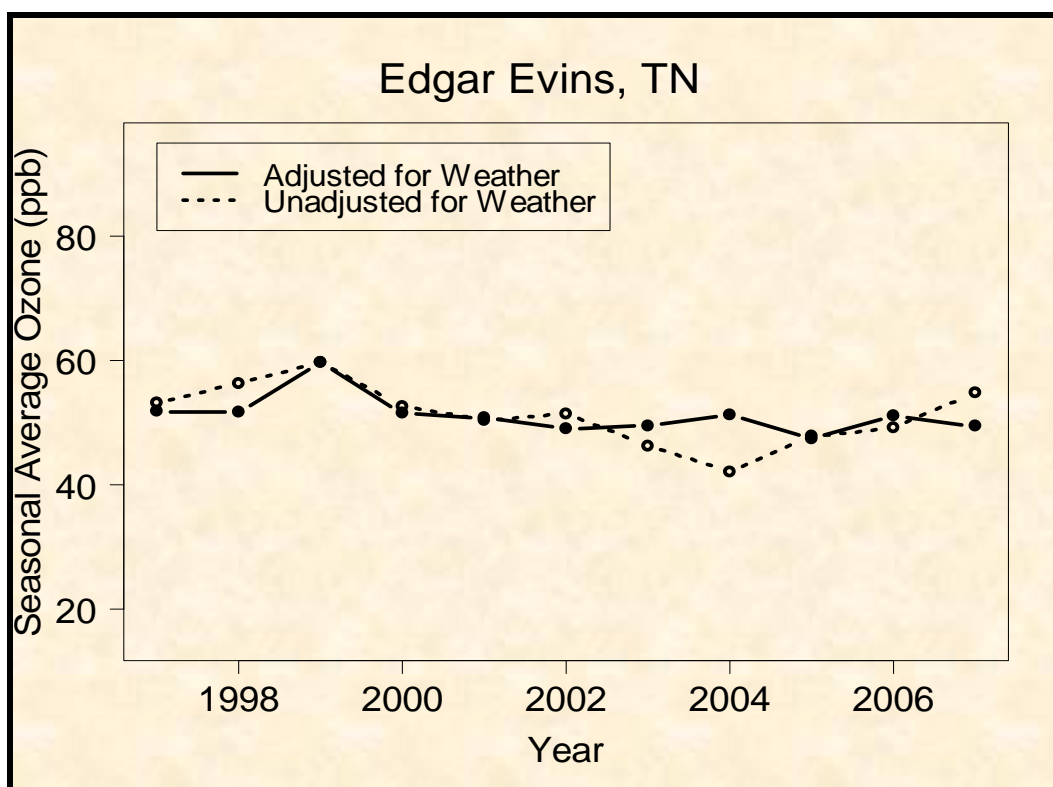
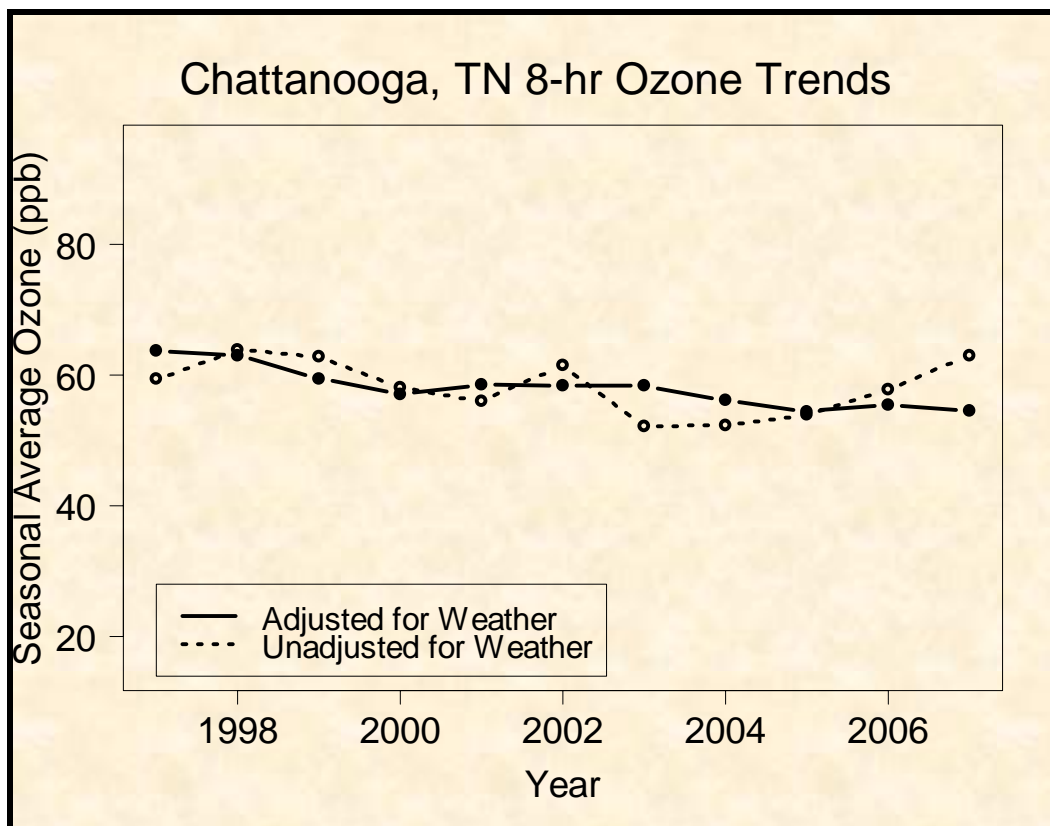
Ozone

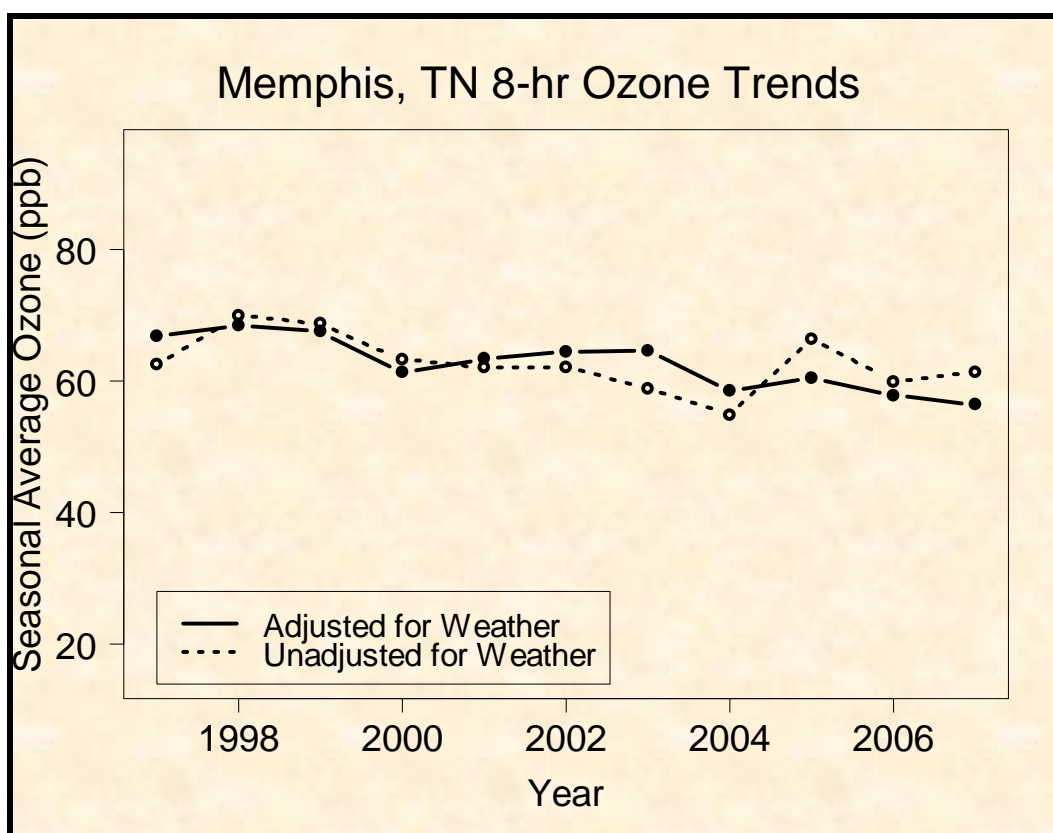
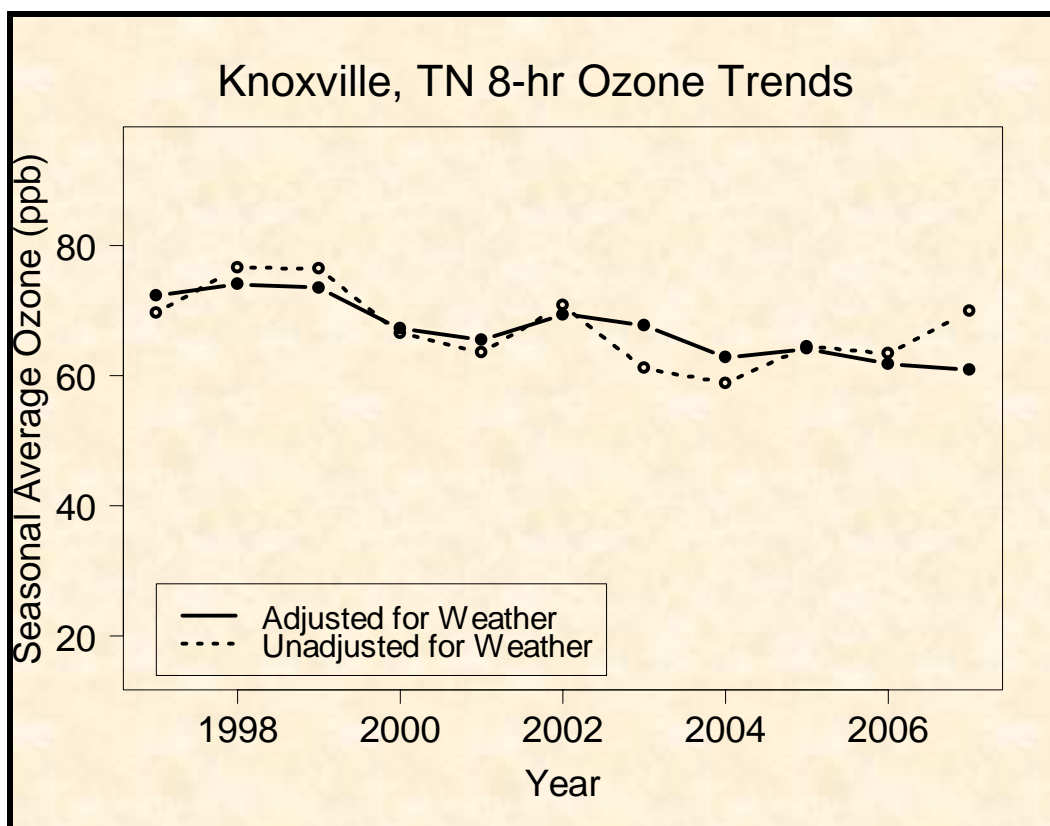
On average, ozone adjusted for weather conditions declined 14 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO_x and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

Seasonal Average 8-hour Ozone Trends







Nashville, TN 8-hr Ozone Trends

